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6-490

Requestor's Name: 09/189130 Serial Number: 09/189130

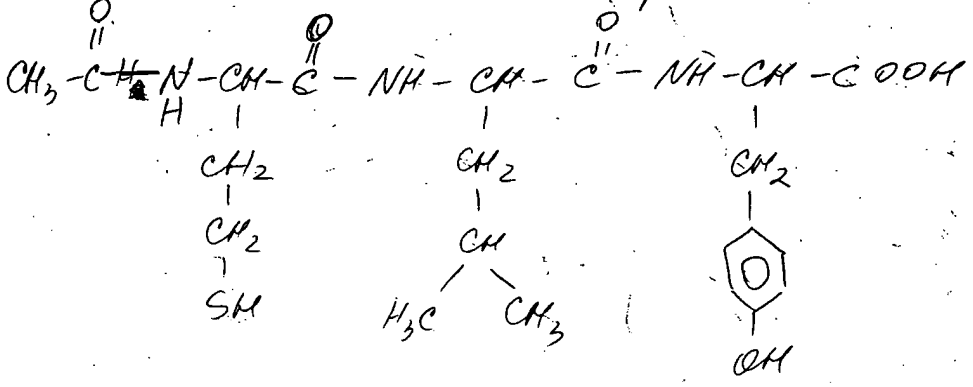
Date: 06/11/99 Phone: 305-4506 Art Unit: 1654

9A15

**Search Topic:**

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

Please search tripeptides.



Thank you

B. Fuhr

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Date completed: 6/16/99
Searcher: jan
Terminal time: 20
Elapsed time:
CPU time:
Total time: 30
Number of Searches: 1
Number of Databases: 4

**Search Site**
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- ✓ CM-1
- ___ Pre-S

**Type of Search**
- ___ N.A. Sequence
- ___ A.A. Sequence
- ✓ Structure
- ___ Bibliographic

**Vendors**
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- ✓ STN
- ___ Dialog
- ___ APS
- ___ Geninfo
- ___ SDC
- ___ DARC/Questel
- ___ Other

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DICTIONARY FILE UPDATES:  16 JUN  99  HIGHEST RN 224827-27-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 13, 1999

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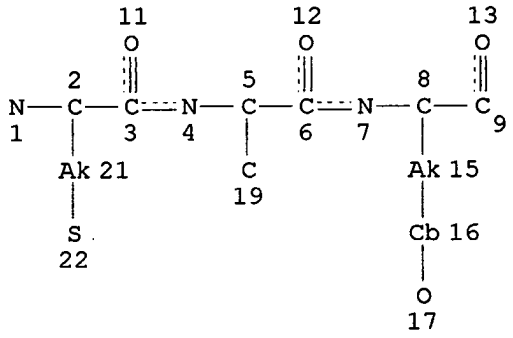


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DEFAULT ECLEVEL IS LIMITED

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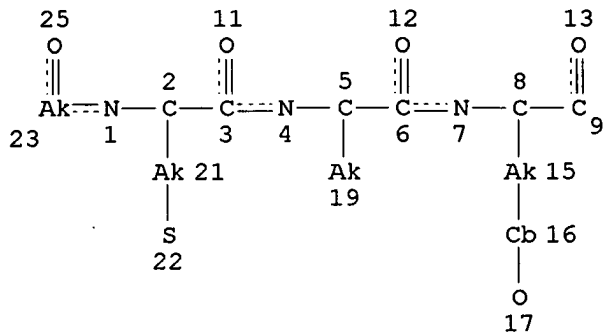


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DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS  20

STEREO ATTRIBUTES: NONE
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L6             4 SEA FILE=REGISTRY ABB=ON  PLU=ON  L5 NOT (SQL/FA OR OC4/ES)

=> d ide can tot

L6   ANSWER 1 OF 4  REGISTRY  COPYRIGHT 1999 ACS
RN   100929-79-1  REGISTRY
CN   L-Tyrosine, N-formyl-L-methionyl-L-leucyl-, compd. with
     N-cyclohexylcyclohexanamine (1:1) (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   L-Tyrosine, N-[N-(N-formyl-L-methionyl)-L-leucyl]-, compd. with
     N-cyclohexylcyclohexanamine (1:1)
FS   STEREOSEARCH
MF   C21 H31 N3 O6 S . C12 H23 N
SR   CAS Registry Services
LC   STN Files:   CHEMCATS, CSCHEM

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     CRN  97521-28-3
     CMF  C21 H31 N3 O6 S

Absolute stereochemistry.
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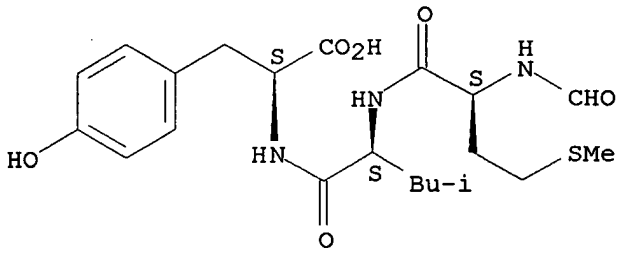


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     CMF  C12 H23 N
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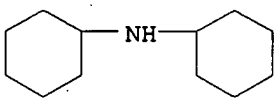
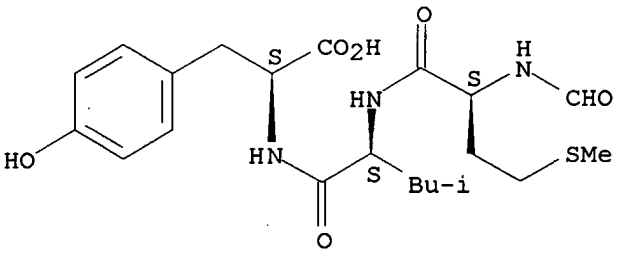



L6 ANSWER 2 OF 4 REGISTRY COPYRIGHT 1999 ACS
RN 97521-28-3 REGISTRY
CN L-Tyrosine, N-formyl-L-methionyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Tyrosine, N-[N-(N-formyl-L-methionyl)-L-leucyl]-
OTHER NAMES:
CN N-Formyl-L-methionyl-L-leucyl-L-tyrosine
FS STEREOSEARCH
MF C21 H31 N3 O6 S
CI COM
SR US National Library of Medicine
LC STN Files: BIOSIS, CA, CAPLUS, CHEMCATS, MEDLINE, TOXLINE, TOXLIT

Absolute stereochemistry.




6 REFERENCES IN FILE CA (1967 TO DATE)
7 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:312532

REFERENCE 2: 121:274052

REFERENCE 3: 117:106876

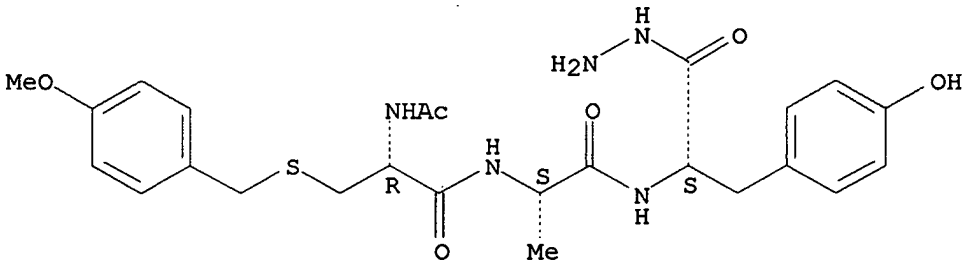
REFERENCE 4: 111:75641

REFERENCE 5: 108:184554

REFERENCE 6: 108:53386

L6 ANSWER 3 OF 4 REGISTRY COPYRIGHT 1999 ACS
RN 76658-43-0 REGISTRY
CN L-Tyrosine, N-[N-[N-acetyl-S-[(4-methoxyphenyl)methyl]-L-cysteinyl]-L-alanyl]-, hydrazide (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H33 N5 O6 S
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

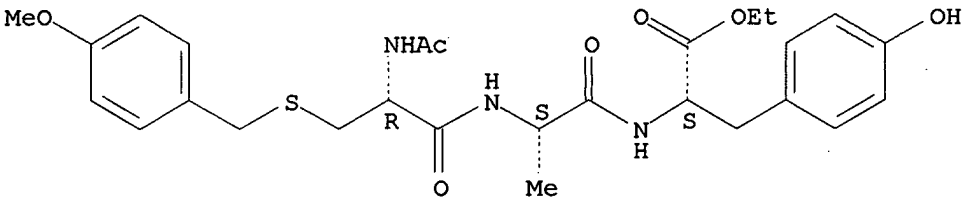


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 94:103803

L6 ANSWER 4 OF 4 REGISTRY COPYRIGHT 1999 ACS
RN 76658-42-9 REGISTRY
CN L-Tyrosine, N-[N-[N-acetyl-S-[(4-methoxyphenyl)methyl]-L-cysteinyl]-L-alanyl]-, ethyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C27 H35 N3 O7 S
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 94:103803

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L8 8 S L6

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L8 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 1999 ACS
AN 1999:350603 HCAPLUS
TI Small peptides and methods for treatment of asthma and inflammation
IN Houck, John C.
PA Hisatek, LLC, USA
SO PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 9925372 | A1 | 19990527 | WO 98-US14103 | 19980707 |

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

PRAI US 97-65336 19971113

AB A pharmaceutical compn. is described as an admixt. of a pharmacol. carrier and a peptide having the formula f-Met-Leu-X (X = Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr). Also described are methods for inhibiting the degranulation of mast cells and for treating inflammation in a patient, for example, where the inflammation is a result of a disease selected from the group consisting of asthma, rheumatoid arthritis and anaphylaxis. In addn., methods are described for inhibiting the release of cytokines in a patient, for inhibiting the release of histamines in a patient, for inhibiting the release leukotrienes in a patient, for reducing adhesion, migration and aggregation of lymphocytes, eosinophils and neutrophils to a site of inflammation in a patient, for reducing the prodn. of IgE antibodies at site of inflammation in a patient, and for inhibiting increased vascular permeability at site of inflammation in a patient. The methods use the described pharmaceutical compn.

IT **97521-28-3**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides and methods for treatment of asthma and inflammation)

L8 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 1999 ACS
AN 1995:545285 HCAPLUS
DN 122:312532
TI H-2M3a violates the paradigm for major histocompatibility complex class I peptide binding
AU Vyas, Jatin M.; Rodgers, John R.; Rich, Robert R.
CS Departments Microbiology Immunology, Baylor College Medicine, Houston, TX, 77030, USA
SO J. Exp. Med. (1995), 181(5), 1817-25
CODEN: JEMEAV; ISSN: 0022-1007
DT Journal
LA English
AB The major histocompatibility (MHC) class I-b mol. H-2M3a binds and presents N-formylated peptides to cytotoxic T lymphocytes. This requirement potentially places severe constraints on the no. of peptides that M3a can present to the immune system. Consistent with this idea, the M3a-Ld MHC class I chimera is expressed at very low levels on the cell surface, but can be induced significantly by the addn. of specific peptides at 27.degree.. Using this assay, the authors show that M3a binds many very short N-formyl peptides, including N-formyl chemotactic peptides and canonical octapeptides. This observation is in sharp contrast to the paradigmatic size range of peptides of 8-10 amino acids binding to most class I-a mols. and the class I-b mol. Qa-2. Stabilization by fMLF-benzylamide could be detected at peptide concns. as low as 100 nM. While N-formyl peptides as short as two amino acids in length stabilized expression of M3a-Ld, increasing the length of these peptides added to the stability of peptide-MHC complexes as detd. by 27-37.degree. temp. shift expts. The authors propose that relaxation of the length rule may represent a compensatory adaptation to maximize the no. of peptides that can be presented by H-2M3a.
IT **97521-28-3**
RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
(formyl peptide structure in binding and stabilization of H-2M3a histocompatibility antigen)

L8 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 1999 ACS
AN 1994:674052 HCAPLUS
DN 121:274052
TI Small duct cholangitis induced by N-formyl l-methionine l-leucine l-tyrosine in rats
AU Yamada, Shinji; Ishii, Motoyasu; Liang, Liu Shi; Yamamoto, Takeshi; Toyota, Takayoshi
CS School of Medicine, Tohoku University, Sendai, 980, Japan
SO J. Gastroenterol. (1994), 29(5), 631-6
CODEN: JOGAET
DT Journal
LA English
AB Primary sclerosing cholangitis (PSC) frequently accompanies inflammatory bowel diseases. In an attempt to increase the understanding of the pathogenesis of PSC, the authors studied bile duct changes in rats with colitis which had been given N-formyl L-methionine L-leucine L-tyrosine (fMLT) rectally; fMLT is one of the chemotactic peptides produced by Escherichia coli, and is secreted into the bile by hepatocytes after it enters the portal blood. Transrectal administration of fMLT induced a marked inflammation in the portal triad and mild hepatocyte necrosis on the 4th day. The infiltrating leukocytes in the portal tract were mostly mononuclear cells, which densely infiltrated around the bile ducts. These

mononuclear cells appeared to attach to bile duct epithelial cells, and they were more numerous in the smaller bile ducts. Electron microscopy revealed that lymphocytes were in direct contact with bile duct lining cells and that some epithelial cells had degenerated or collapsed. These results suggest that this E. coli-derived peptide may induce cholangitis in the small bile duct through cell-mediated mechanisms. Since these pathol. changes resemble those of the bile duct obsd. in the early stage of PSC, it can be concluded that bacterial chemotactic peptides may play a role in the pathogenesis of small-duct PSC.

IT **97521-28-3**
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(small duct cholangitis induction)

L8 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 1999 ACS
AN 1992:506876 HCAPLUS
DN 117:106876
TI Isolation and purification of N-formylmethionine aminopeptidase from rat intestine
AU Sherriff, Robert M.; Broom, Murray F.; Chadwick, Vinton S.
CS Dep. Exp. Med., Wellcome Med. Res. Inst., Dunedin, N. Z.
SO Biochim. Biophys. Acta (1992), 1119(3), 275-80
CODEN: BBACAQ; ISSN: 0006-3002
DT Journal
LA English
AB The intestinal mucosal epithelium is exposed to products of intestinal bacteria including potent inflammatory N-formylmethionyl oligopeptides. An N-formylmethionine aminopeptidase has been purified 2300-fold from rat intestine and was shown to degrade natural fMet oligopeptides from Escherichia coli culture supernatants with loss of bioactivity (release of specific granule constituents from human polymorphonuclear leukocytes) and immunoreactivity (assessed using a polyclonal anti-fMet-Leu-Phe antiserum). The enzyme (which was specific for N-terminal acylmethionine residues) had a native Mr of 340,000 and comprised four subunits of Mr 82,000. The presence of this enzyme in intestinal mucosa could prevent absorption of intact bioactive fMet peptides produced by commensal bacteria in the gut lumen.

IT **97521-28-3**
RL: RCT (Reactant)
(reaction of, with formylmethionine aminopeptidase of intestine, kinetics of)

L8 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 1999 ACS
AN 1989:475641 HCAPLUS
DN 111:75641
TI Bacterial chemotactic oligopeptides and the intestinal mucosal barrier
AU Ferry, Dianne M.; Butt, Terence J.; Broom, Murray F.; Hunter, June; Chadwick, Vinton S.
CS Med. Sch., Univ. Otago, Dunedin, N. Z.
SO Gastroenterology (1989), 97(1), 61-7
CODEN: GASTAB; ISSN: 0016-5085
DT Journal
LA English
AB Intestinal absorption and enterohepatic circulation of N-formyl-Met-Leu-125I-Tyr, a bioactive synthetic analog of the bacterial chemotactic peptide N-formyl-Met-Leu-Phe were investigated in the rat. In ileum and proximal and distal colon, dithiothreitol, which increases mucosal permeability, increased peptide absorption and biliary recovery 4-fold, 70-fold, and 20-fold over control values, resp. When dithiothreitol was combined with d-l-benzyl succinate, a potent inhibitor

of intestinal carboxypeptidase, absorption and biliary recovery from ileal loops increased markedly to 40-fold over control, whereas there was no further increase in absorption from colon loops. There was a strong correlation between biliary N-formyl-Met-Leu-125I-Tyr recovery and intestinal absorption of 51Cr-ethylenediaminetetraacetate, a marker of passive mucosal permeability. Thus, in the ileum both enzymic degrdn. and restricted mucosal permeability contribute to the intestinal barrier to luminal bacterial formyl oligopeptides. In the colon, however, enzymic mechanisms are less active and restricted mucosal permeability is the major factor. Abnormalities of the intestinal mucosal barrier to proinflammatory bacterial peptides could play a role in inflammatory disorders of the gut.

IT **97521-28-3**
RL: BIOL (Biological study)
(absorption of, by ileum vs. colon, enzymic degrdn. and mucosal permeability in, inflammation in relation to)

L8 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 1999 ACS
AN 1988:184554 HCAPLUS
DN 108:184554
TI Enterohepatic circulation of bacterial chemotactic peptide in rats with experimental colitis
AU Hobson, Christopher H.; Butt, Terence J.; Ferry, Dianne M.; Hunter, June; Chadwick, Vinton S.; Broom, Murray F.
CS Med. Sch., Univ. Otago, Dunedin, N. Z.
SO Gastroenterology (1988), 94(4), 1006-13
CODEN: GASTAB; ISSN: 0016-5085
DT Journal
LA English
AB The assocn. of hepatobiliary disorders with colonic inflammation is well recognized. Although the pathophysiol. is obscure, increased permeation of toxic bacterial products across the inflamed gut to the portal circulation might be one mechanism. Potentially toxic metabolites include N-formylated chemotactic peptides that are produced by several species of intestinal bacteria and can be detected in colonic fluid in vivo. To investigate the metabolic fate of one of these low mol. wt. proinflammatory peptides, N-formyl L-methionine L-leucine 125I-L-tyrosine was introduced into colon loops of healthy rats and rats with exptl. colitis induced by rectal instillation of 15% (vol/vol) acetic acid. Biliary excretion of intact peptide over 3 h was 6.4 pmol in normal rats and 49.0 pmol in rats with colitis. Thus, an enterohepatic circulation of synthetic N-formyl L-methionine L-leucine L-tyrosine has been demonstrated in the rat. Exptl. colitis was assocd. with an 8-fold increase in biliary excretion of this proinflammatory bacterial peptide. Proinflammatory bacterial peptides synthesized by colonic bacteria could be important in the pathophysiol. of colon inflammation and its frequently assocd. hepatobiliary complications.

IT **97521-28-3**, N-Formyl L-methionyl L-leucyl L-tyrosine
RL: PROC (Process)
(enterohepatic circulation of, in colitis)

L8 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 1999 ACS
AN 1988:53386 HCAPLUS
DN 108:53386
TI Uptake of ascorbic acid by leukocytes
AU Moser, Ulrich
CS Dep. Vitam. Nutr. Res., F. Hoffmann-La Roche and Co., Ltd., Basel, CH-4002, Switz.
SO Ann. N. Y. Acad. Sci. (1987), 498(Conf. Vitam. C, 3rd., 1986), 200-15

CODEN: ANYAA9; ISSN: 0077-8923
DT Journal
LA English
AB Ascorbic acid (I) was distributed primarily in the cytosol of guinea pig adrenal glands, in animals fed a normal diet contg. 500 mg I/kg or a marginal diet contg. 50 mg/kg for 4 wk. In porcine adrenal cortical cells, I uptake exhibited satn. kinetics with a Km of 20.5 .mu.M and a Vmax of 7.3 nmol/108 cells. I transport by human granulocytes and mononuclear cells was more complex, consisting of a saturable active transport plus passive diffusion. It was calcd. that at 25-50 .mu.M I, a normal plasma concn., active transport of I contributes 64-72% in granulocytes and 87-89% in mononuclear cells. Glucose inhibits the uptake of I by these cells. I uptake, but not that of glucose, was stimulated up to 3-fold by various N-formyl peptides. Ca2+ plus A 23187 also stimulated the uptake of I. In adrenal cortical cells I transport required Na+, K+, and Ca2+, and was not inhibited by glucose. I uptake by both granulocytes and mononuclear cells was inhibited by D-ascorbic acid and competitively by D-erythorbic acid. Evidently, I uptake into cells with a high I concn. is mediated by a stereospecific active transport mechanism that exhibits different kinetics depending on the cell type examd.
IT **97521-28-3**, N-Formyl-L-methionyl-L-leucyl-L-tyrosine
RL: BIOL (Biological study)
(ascorbate transport by granulocytes of humans response to)

L8 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 1999 ACS
AN 1981:103803 HCAPLUS
DN 94:103803
TI Studies on the synthesis of proteinase inhibitors. II. Synthesis of cyclic nonapeptide fragments and analogs related to the reactive sites of soybean Bowman-Birk inhibitor
AU Terada, Shigeyuki; Sato, Kazuki; Kato, Tetsuo; Izumiya, Nobuo
CS Fac. Sci., Kyushu Univ., Fukuoka, 812, Japan
SO Int. J. Pept. Protein Res. (1980), 15(5), 441-54
CODEN: IJPPC3; ISSN: 0367-8377
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Peptides I (R = Ac, R1 = NH2, X = Thr, X1 = Lys, D-Lys, Arg, Leu; X-X1-X2 = Ala-Lys-Ser, Thr-Lys-Ala; R = H, R1 = OH, X-X1-X2 = Thr-Lys-Ser) and II (R = Ac, R1 = NH2, X3 = Leu, Tyr; R = H, R1 = OH, X3 = Leu), which are related to sequences 14-22 and 41-49, resp., of the title inhibitor, were prepd. by conventional coupling methods in soln. Thus, BOC-Ser(CH2Ph)-Asn-Pro-Pro-Gln-Cys(MBzl)-NH2 (BOC = Me3CO2C, MBzl = CH2C6H4OMe-p) was BOC-deblocked and then coupled to Ac-Cys(MBzl)-Thr-Lys(Z)-NHNH2 (Z = CO2CH2Ph) by the azide method to give Ac-Cys(MBzl)-Thr-Lys(Z)-Ser-Asn-Pro-Pro-Glu-Cys(MBzl)-NH2, which was deblocked by HF and then oxidized to give I (R = Ac, R1 = NH2, X-X1-X2 = Thr-Lys-Ser). BOC-Ser(CH2Ph)-Tyr-Pro-Ala-Gln-Cys(MBzl)-NH2 was BOC-deblocked and then coupled to Ac-Cys(MBzl)-Ala-Leu-NHNH2 by the azide method to give Ac-Cys(MBzl)-Ala-Leu-Ser(CH2Ph)-Tyr-Pro-Ala-Gln-Cys(MBzl)-NH2, which was deblocked by HF and then oxidized by K3Fe(CN)6 to give II (R = Ac, R1 = NH2, X3 = Leu). All intermediates in the synthesis of I and II were characterized. Dimers of I and II formed during the deblocking-oxidn. step; these dimers were a mixt. of parallel and antiparallel isomers. The inhibitory properties of I and II toward trypsin and chymotrypsin were detd.
IT **76658-43-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and peptide coupling of, with hexapeptide deriv.)

IT **76658-42-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with hydrazine)

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(FILE 'HCAPLUS' ENTERED AT 06:47:35 ON 16 JUN 1999)
SEL RN L8 1

FILE 'REGISTRY' ENTERED AT 06:48:45 ON 16 JUN 1999
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L11 7 S L10 NOT L6

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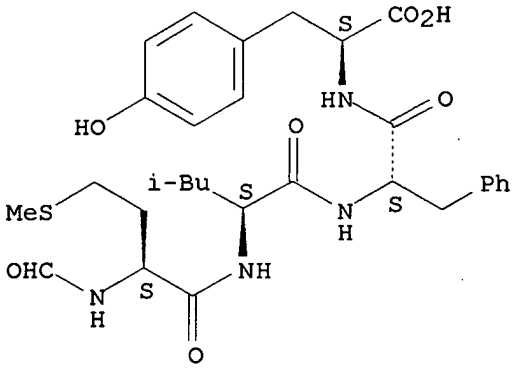
L11 ANSWER 1 OF 7 REGISTRY COPYRIGHT 1999 ACS
RN **158724-27-7** REGISTRY
CN L-Tyrosine, N-formyl-L-methionyl-L-leucyl-L-phenylalanyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Tyrosine, N-[N-[N-(N-formyl-L-methionyl)-L-leucyl]-L-phenylalanyl]-
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C30 H40 N4 O7 S
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.



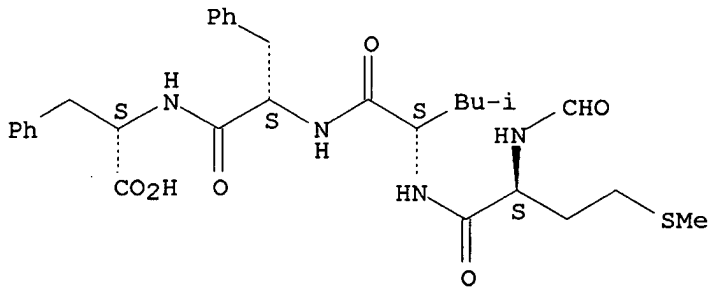

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 121:272065

L11 ANSWER 2 OF 7 REGISTRY COPYRIGHT 1999 ACS
RN **80180-63-8** REGISTRY
CN L-Phenylalanine, N-formyl-L-methionyl-L-leucyl-L-phenylalanyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Phenylalanine, N-[N-[N-(N-formyl-L-methionyl)-L-leucyl]-L-phenylalanyl]-
OTHER NAMES:
CN N-Formyl-Met-Leu-Phe-Phe
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C30 H40 N4 O6 S

LC STN Files: CA, CANCERLIT, CAPLUS, CHEMCATS, CSCHEM, MEDLINE, MSDS-OHS

Absolute stereochemistry.



16 REFERENCES IN FILE CA (1967 TO DATE)
17 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:139417

REFERENCE 2: 123:309749

REFERENCE 3: 122:312532

REFERENCE 4: 118:20894

REFERENCE 5: 115:90521

REFERENCE 6: 114:162246

REFERENCE 7: 113:113632

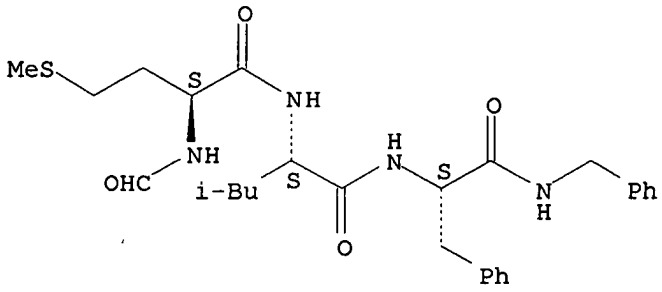
REFERENCE 8: 109:21466

REFERENCE 9: 105:206659

REFERENCE 10: 104:17324

L11 ANSWER 3 OF 7 REGISTRY COPYRIGHT 1999 ACS
RN **80180-62-7** REGISTRY
CN L-Phenylalaninamide, N-formyl-L-methionyl-L-leucyl-N-(phenylmethyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H38 N4 O4 S
LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, MSDS-OHS

Absolute stereochemistry.



7 REFERENCES IN FILE CA (1967 TO DATE)
8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:284172

REFERENCE 2: 122:312532

REFERENCE 3: 115:90521

REFERENCE 4: 114:162246

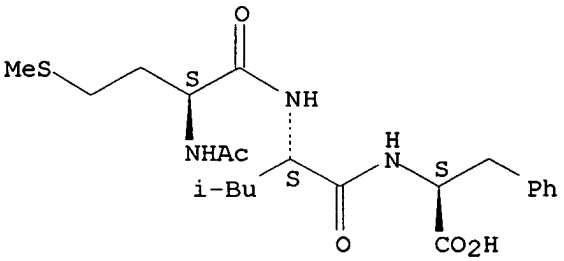
REFERENCE 5: 111:192908

REFERENCE 6: 96:141018

REFERENCE 7: 96:50487

L11 ANSWER 4 OF 7 REGISTRY COPYRIGHT 1999 ACS
RN **73572-34-6** REGISTRY
CN L-Phenylalanine, N-acetyl-L-methionyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Phenylalanine, N-[N-(N-acetyl-L-methionyl)-L-leucyl]-
FS STEREOSEARCH
MF C22 H33 N3 O5 S
LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, MSDS-OHS

Absolute stereochemistry.



10 REFERENCES IN FILE CA (1967 TO DATE)
11 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:181625

REFERENCE 2: 122:312532

REFERENCE 3: 120:31204

REFERENCE 4: 117:106876

REFERENCE 5: 115:88703

REFERENCE 6: 114:20549

REFERENCE 7: 111:78601

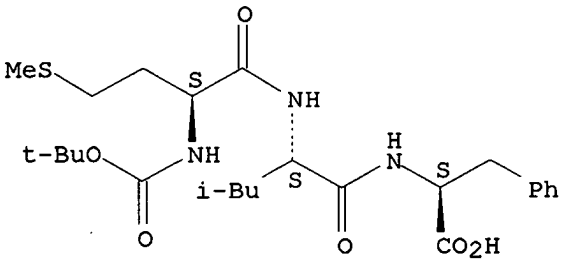
REFERENCE 8: 96:141018

REFERENCE 9: 93:236634

REFERENCE 10: 93:24113

L11 ANSWER 5 OF 7 REGISTRY COPYRIGHT 1999 ACS
RN **67247-12-5** REGISTRY
CN L-Phenylalanine, N-[(1,1-dimethylethoxy)carbonyl]-L-methionyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Phenylalanine, N-[N-[N-[(1,1-dimethylethoxy)carbonyl]-L-methionyl]-L-leucyl]-
FS STEREOSEARCH
MF C25 H39 N3 O6 S
LC STN Files: BEILSTEIN*, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CSCHEM, MEDLINE, MSDS-OHS, TOXLINE, TOXLIT
(*File contains numerically searchable property data)

Absolute stereochemistry.




24 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
25 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:84824

REFERENCE 2: 122:312532

REFERENCE 3: 120:31195

REFERENCE 4: 118:20894

REFERENCE 5: 117:127729

REFERENCE 6: 116:174741

REFERENCE 7: 115:159756

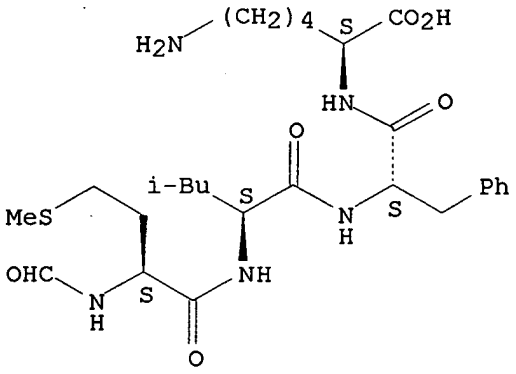
REFERENCE 8: 115:45561

REFERENCE 9: 114:207760

REFERENCE 10: 113:232025

L11 ANSWER 6 OF 7 REGISTRY COPYRIGHT 1999 ACS
RN **67247-11-4** REGISTRY
CN L-Lysine, N-formyl-L-methionyl-L-leucyl-L-phenylalanyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Lysine, N2-[N-[N-(N-formyl-L-methionyl)-L-leucyl]-L-phenylalanyl]-
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C27 H43 N5 O6 S
CI COM
LC STN Files: CA, CAPLUS, CHEMCATS, TOXLIT, USPATFULL

Absolute stereochemistry.



42 REFERENCES IN FILE CA (1967 TO DATE)
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
43 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:167124

REFERENCE 2: 129:250015

REFERENCE 3: 129:158836

REFERENCE 4: 128:318878

REFERENCE 5: 128:72415

REFERENCE 6: 127:217116

REFERENCE 7: 126:343881

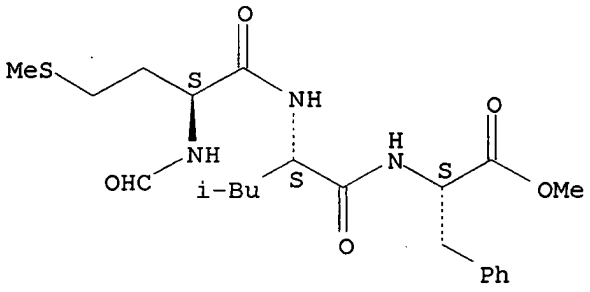
REFERENCE 8: 126:305794

REFERENCE 9: 126:305793

REFERENCE 10: 126:305792

L11 ANSWER 7 OF 7 REGISTRY COPYRIGHT 1999 ACS
RN **65929-03-5** REGISTRY
CN L-Phenylalanine, N-formyl-L-methionyl-L-leucyl-, methyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Phenylalanine, N-[N-(N-formyl-L-methionyl)-L-leucyl]-, methyl ester
FS STEREOSEARCH
MF C22 H33 N3 O5 S
LC STN Files: BEILSTEIN*, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CSCHEM, EMBASE, MEDLINE, MSDS-OHS, TOXLINE, TOXLIT
(*File contains numerically searchable property data)

Absolute stereochemistry.




43 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
44 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:161832

REFERENCE 2: 129:136488

REFERENCE 3: 128:114013

REFERENCE 4: 127:307667

REFERENCE 5: 126:170336

REFERENCE 6: 126:144540

REFERENCE 7: 125:193358

REFERENCE 8: 124:344071

REFERENCE 9: 124:261708

REFERENCE 10: 124:193244

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=> s 225109-04-6 or 225109-05-7 or 225111-44-4
0 225109-04-6
(225109-04-6/RN)
0 225109-05-7
(225109-05-7/RN)
0 225111-44-4

← from ref #1
- not yet available
- indexing in progress

(225111-44-4/RN)
L12 0 225109-04-6 OR 225109-05-7 OR 225111-44-4